A PLAN TO PROMOTE BROADBAND DEPLOYMENT AND REFORM HIGH-COST SUPPORT WITHOUT INCREASING OVERALL USF LEVELS

The Broadband and Carrier-of-Last-Resort Support (BCS) Solution

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September 18, 2008

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Universal service has stood as a cornerstone of United States telecommunications policy since before the passage of the Communications Act. For most of that time, and consistent with the pervasively-regulated nature of telecommunications markets, the country's universal service policy has been implemented through a complex system of subsidies. Congress enshrined universal service as an explicit policy in 1996 by adding Section 254 of the Act, which mandates that the Commission ensure that rates for telecommunications services in high-cost, rural and insular areas of the country be reasonably comparable to those found in urban areas. Per the Act, such assurance should be "sufficient, predictable, and explicit." The transition from implicit to explicit support is necessary as a consequence of the development of competition in telecommunications markets, as implicit subsidies—such as forced rate averaging across low-cost and high-cost service areas—disproportionately burden some consumers, distort competition, and ultimately fail to provide the required "sufficient, predictable, and explicit" support.

Universal service has been, and still is, achieved through a paradigm of requiring one provider in an area (nearly always the incumbent local exchange carrier, or ILEC) to provide service to any requesting customer at an affordable rate without regard to the underlying cost of providing the service. This carrier of last resort (COLR) obligation has been funded historically through a combination of implicit support (e.g., access charges for non-local traffic and averaged rates for service in lower-cost areas) and some explicit support. Changes in technology and regulation have created substantial challenges to this paradigm and to the Commission's efforts at fulfilling the statutory mandate.

Nearly all parties agree that the current federal system of support for universal service—the federal Universal Service Fund (USF)—is badly in need of reform. There are a wide range of ideas for reform, however, ranging from market-based distribution methodologies to increasing support for broadband. The Federal-State Joint Board on Universal Service has proposed global reform of the system, and the Commission itself not only put the Joint Board's Recommended Decision out for public comment, but also put out two separate Notices of Proposed Rulemaking on its own to address discrete aspects of the universal service process. Each of these proposals has its own merits, but Embarq submits that one thing is clear about all of them—the Commission's first task is to rationalize the method by which support is calculated and distributed in rural and high-cost areas located in price cap carrier territories. For example, current proposals for reverse auctions struggle to identify the appropriate areas for support and the baseline amounts for adequately funding the COLR obligation in the absence of an auction. It is clear that the current distribution of support, which has been rejected by the Tenth Circuit Court of Appeals, does not provide a reasonable foundation or starting point for sustainable USF reform should some type of auction mechanism be contemplated.

Just as nearly all parties agree that the current system of high-cost support is in need of reform, so too do nearly all parties agree that the Commission should promote broadband deployment. Embarq agrees that more should be done to encourage investment in advanced telecommunications networks in high-cost areas, just as Congress specified in section 706 of the Telecommunications Act of 1996. This can be done, and indeed should be done, without designating broadband as a supported service at this time. In particular, given available funding levels and current technology, it is unlikely that support recipients could reasonably be expected to provide broadband ubiquitously throughout the areas in which they receive support as required for supported services. Instead of making broadband a supported service, the Commission can best promote broadband deployment by reforming the current system of high-cost support to direct support to the truly high-cost areas and requiring support recipients to commit to deploy broadband to a substantial percentage of the customers in those areas.

The federal system of high-cost support must be reformed to end duplicative support in areas where a free market would produce service without support *and* also to provide explicit support to all areas where a free market would not provide such service. Ideally, this would be a relatively straight-forward exercise—the un-served areas would be readily observable because there would be no provider in those places. But telecommunications markets are not yet free markets, because one, and only one, provider in each market—the incumbent local exchange carrier (ILEC)—is required to provide service even where it is not economically rational for it to do so. This disparity in regulatory obligation fundamentally affects this proceeding because federal and state regulators will best serve the public interest if they (1) stop providing support to carriers where it would be economically rational to build networks anyway (particularly where those networks duplicate existing networks); and (2) acknowledge that it is the COLR obligation that has produced truly universal service to this point, therefore support should be targeted to those areas where, absent this obligation, service would not be offered.

The current system of high-cost support is plagued by insufficiently targeted high-cost support in many areas because of the problem of study-area averaging. In brief, the use of average cost calculations assumes that rates will also be averaged and, therefore, that higher returns in low-cost areas will offset lower and negative returns in high-cost areas. Competition has invalidated this assumption, however, as competitors will charge lower rates and win customers in low-cost areas, thereby reducing the incumbent's revenues and eliminating the higher returns that were implicitly subsidizing the service in high-cost areas. Therefore, high-cost support must be more narrowly targeted in some study areas, including some rural study areas, to fulfill the directive of Section 254 to make universal service support explicit, predictable, and sufficient.

Upon analysis, it is apparent that the problems with the current USF distribution (both providing too much support in some places and too little support in other places) are more acute (and perhaps largely confined to) areas served by ILECs that are regulated in the federal jurisdiction pursuant to incentive regulation (price caps). Price cap carriers are required under state and federal regulation to provide COLR service even where they would not choose to provide service because is not economically feasible to do so, so they continue to maintain and build out networks in very high-cost areas while charging below-cost, affordable rates to customers. Right now, such uneconomic service is funded almost entirely through implicit subsidies that flow from access charges and averaged rates to other customers in the urban and suburban areas of the same study area. However, the Commission has frequently noted that implicit subsidies cannot survive the increasing competition that is raging in the small towns and cities throughout the country.

Unlike customers served by rate-of-return carriers, rural customers served by price-cap carriers are exposed to the increasing risk of service degradation because price-cap carriers are not permitted to raise end-user or access rates to compensate for eroding COLR support. Moreover, what explicit USF support is available is capped for these carriers. Finally, as support for the continuing COLR obligation erodes, price-cap ILECs are less able to invest in and maintain their networks, which are used by all broadband and wireless providers. Thus, the current failings of the federal USF are threatening broadband investment as well.

To solve these problems and facilitate further reform consistent with the Joint Board Recommended Decision and Commission proposals, Embarq proposes a relatively simple and focused plan to reform the operation of the current USF. The BCS Solution will produce substantially more broadband in rural areas, provide for better cost control, and serve as a sound structural foundation upon which any meritorious reform proposal could be implemented. The BCS Solution would have the following essential elements:

- Without increasing the size of the fund, the Broadband and Carrier-of-Last-Resort Support (BCS) solution would create a new mechanism—the BCS—which would be capped at approximately $1 billion and replace support from the existing Non-Rural High-Cost Model support mechanism, as well as existing loop support for Rural, price-cap carriers.

- Because the BCS Solution does not increase fund size, it would not increase overall USF contributions, but would instead redistribute certain amounts from other mechanisms.

- The BCS Solution would support the COLR obligation in price-cap study areas, with the initial amounts calculated based on relative loop costs. Support amounts could be re-visited after five years.

- The BCS Solution would allocate support to price cap high-cost wire centers based on a proxy for household density in the wire center—HCPM estimated loop costs—which would be compared to a national benchmark selected to produce the desired fund size.

- BCS support recipients in price-cap areas would make three commitments:
    1. to make available broadband of at least 1.5 Mbps downstream to at least 85% of the customers in each wire center receiving support;
    2. to provide supported local service at rates that meet the statutory requirements of affordability and comparability; and
    3. to build-out and serve the entire wire center using only their own facilities within five years.

- Under the BCS Solution, broadband does not become a "supported service". Rather, broadband represents a simple commitment that a recipient carrier agrees to make in order to receive support.

- Once the funding level is established, each wire center would receive the same support for five years. Support levels would be revisited thereafter at five-year intervals. Consistent with the economics of the COLR obligation, support levels would not vary with changes in the number of lines served.

- All CETCs would be able to participate on a technologically and competitively neutral basis. CETCs, including wireless carriers, would be eligible to receive support for building and maintaining network in truly high-cost rural areas, subject to the same mandates as exist for ILECs. If CETCs meet these requirements in all price cap high cost wire centers, CETCs would potentially receive up to half of the BCS, or up to approximately $500 million annually.

- The BCS would fund only the ILEC and no more than one CETC in an area. Where necessary, the entity that designates eligible telecommunications carriers (the state commission or the Commission) would select among competing CETCs based on an auction or Request for Proposal process, or some other such mechanism it may establish. The winner would receive a renewable five-year term, subject to buy out at a predetermined amount.

- Rate-of-return carriers and other USF support mechanisms would be unaffected by this reform proposal—such recipients would draw USF support in the same way they do today.

- In order to resolve outstanding 10th Circuit issues, carriers receiving support from the BCS would commit to provide the supported services within a specified range of rates. Specifically, within the range of rates for urban areas identified by the Commission's Reference Book of Rates, Price Indices, and Household Expenditures for Telephone Service.

The BCS Solution would make substantial progress on the objectives set out by the Federal-State Joint Board on Universal Service last fall in its Recommended Decision. Additionally, the BCS Solution would also fulfill significant objectives put forth by the Commission in the Identical Support NPRM and the Reverse Auction NPRM released together with the Recommended Decision. Moreover, the BCS Solution would facilitate further reform along the lines suggested in those documents.

The BCS Solution is competitively neutral and it affords wireless eligible telecommunications carriers (ETCs) in the aggregate a reasonable opportunity to continue receiving most of the support they receive today, in contrast to the Commission's tentative conclusion in the Reverse Auction NPRM. CETCs would be eligible for support under the new BCS mechanism, provided they meet the broadband, benchmark rate, and build-out commitments that ILECs would make to receive support. In addition to the potential to receive as much as $500 million in BCS support, wireless CETCs would continue to receive Rural High-Cost Loop support at they do today (which may amount to over $700 million). Therefore, CETCs could very well continue to receive, in the aggregate, over $1 billion in federal high-cost USF support.

In brief, the BCS Solution has several significant advantages:

1. it would provide support for high cost areas of price cap carriers that is currently not being provided, and stabilize the amount to promote rural infrastructure investment;
2. it could be implemented relatively easily using current mechanisms;
3. it would facilitate substantial broadband development in rural America;
4. it would provide a firm foundation for future reform of universal service and intercarrier compensation;
5. it would promote competition by helping to remove implicit subsidies;
6. it would promote rather than harm competitively neutrality;
7. it would more adequately address the need for more targeted universal service support to recognize the investment incentives for price cap carriers; and
8. it would resolve the outstanding Tenth Circuit remand issues.

With all of these advantages, the Commission should adopt BCS Solution as an essential and significantly beneficial first step in universal service reform.

I. LEGAL BACKGROUND—THE STATUTORY OBLIGATION TO PROVIDE EXPLICIT SUPPORT FOR CARRIER-OF-LAST-RESORT SERVICE

The Communications Act of 1934 established the chief goal of American communications policy: "to make available, so far as possible, to *all people of the United States* … a rapid, efficient, nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges."[1] This goal was amended in 1996, to add a second goal: investment in advanced telecommunications networks (broadband deployment).[2] These twin goals are vital to our economy, and like the electrification of the countryside and the building of our nation's highways, the ubiquitous presence of voice and data communications in virtually every American home is a great accomplishment. Our nation's telecommunications infrastructure provides a foundation for our economic health and vitality, and it will only become increasingly important as we continue the transition to broadband networks. As information processing becomes an increasingly central aspect of our economy, we simply cannot afford to leave parts of our country disconnected.[3]

Telecommunications infrastructure also supports homeland security. Over time, it will become virtually impossible to protect our country against terrorism or increased criminal activity if there are substantial land areas that are isolated from our critical road, electrical, and communications infrastructures. Similarly, ubiquitous availability of high-quality, affordable telecommunications services facilitates our local and national responses to natural disasters, such as hurricanes. As Chairman Martin wrote in 2006 when announcing the creation of the Commission's Homeland Security Bureau, "[t] he events of September 11th, 2001 and last year's

[1] 47 U.S.C. § 151.

[2] Section 706 of the Telecommunications Act of 1996, 47 U.S.C § 157nt.

[3] National Telecommunications & Information Administration, Networked Nation: Broadband in America 2007 (Jan. 2008).

Hurricane season underscored America's reliance on an effective national telecommunications infrastructure."[4] Finally, ubiquitous communications offerings benefit everyone, including those living in low-cost regions, because they expand contact with others who might otherwise remain unconnected. As economists note, in fields subject to "network effects," goods or services are more valuable to each customer when other customers also use them.[5] The more people and places each of us can call, the more we can rely on telecommunications and the more valuable the network becomes for each of us.

The 1996 Telecommunications Act added Section 254 to the Communications Act to enshrine the existing universal service program, to expand it to cover the removal of implicit subsidies throughout the country, and to expand USF for schools, libraries and rural health care providers. Section 254 requires in essential part that

> Consumers in all regions of the Nation, including low-income consumers and those in rural, insular, and high cost areas, should have access to telecommunications and information services, including interexchange services and advanced telecommunications and information service, that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charges for similar service in urban areas.[6]

Any contribution mechanism must be equitable and nondiscriminatory,[7] and the support mechanisms must be "specific, predictable and sufficient . . . to preserve and advance universal service."[8] As the Commission acts on the recommendation of the Federal-State Joint Board on

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[4] *Establishment of the Public Safety and Homeland Security Bureau And Other Organizational Changes*, Order, 21 FCC Rcd 10867, 10877 (separate statement of Chairman Kevin J. Martin) (2006).

[5] *E.g.,* Joseph Farrell & Garth Saloner, *Standardization, Compatibility, and Innovation*, 16 RAND Journal of Economics 70 (Spring, 1985); Michael L. Katz & Carl Shapiro, *Network Externalities, Competition, and Compatibility*, 75 American Economic Review 424 (Jun. 1985);

[6] 47 U.S.C. § 254(b)(3).

[7] *Id.*, § 254(b)(4).

[8] *Id.*, § 254(b)(5).

universal service and considers reforming the high-cost support programs in the federal Universal Service Fund (USF), it must abide by these statutory mandates.

II. THE COMMISSION MUST ADDRESS PROBLEMS WITH CURRENT USF.

For price cap carriers, the current practice of study-area averaging ensures that a large part of the cost of universal service is borne by their urban and suburban customers because these carriers are compelled to provide service in uneconomic areas and charge below-cost rates for such service. Virtually all ILECs are currently under requirements to provide quality service to all customers who agree to pay the price for service, which is the carrier-of-last-resort requirement.[9] This requirement mandates that a carrier build and operate its network in areas of the country that are not economic to serve on their own. ILECs under the carrier-of-last-resort obligation constitutionally must be given the opportunity to recover their costs or the carrier-of-last-resort obligation must be eliminated.

What is more, whether or not there is an explicit federal carrier-of-last-resort obligation, the Commission has directly assumed responsibility for a share of the obligation because a substantial percentage of the costs associated with carrier-of-last-resort service are assigned to the federal jurisdiction. Therefore, the Commission has recognized and supported the joint federal/state carrier-of-last-resort obligation through its implementation of the interstate access charge and universal service systems. Indeed, it is precisely the federal policy that customers of intrastate rates in rural, insular, and high-cost areas receive reasonably comparable prices to urban areas which reinforces the federal obligation to support the results of the state carrier-of-last-resort obligation by providing explicit support. Accordingly, the Commission must meet its

[9] Comments of Independent Telephone & Telecommunications Association, CC Docket No. 05-337, 9, 11 n.21, and 16 (filed Apr. 17, 2008).

part of this bargain that carrier-of-last-resort and universal service are intended to impose on carriers, by creating a universal service support mechanism that can substitute the study area implicit subsidy with an explicit universal service subsidy.

The Commission can quickly and easily accomplish significant USF Reform by reducing reliance on statewide and study-area averaging for price cap carriers. This study-area averaging system worked adequately when local exchange carriers were protected monopolies. Such implicit subsidies, however, are utterly inconsistent with a competitive marketplace. Customers and competition are harmed by perpetuating the old system of making only a subset of customers pay the bulk of the cost of universal service through implicit subsidies. Thus, the cost of paying for this obligation should belong to all of society and not just those people who choose to be customers of an ILEC in a particular study are.

The Commission long ago concluded:

> implicit subsidies were sustainable in the monopoly environment because some consumers (such as urban business customers) could be charged rates for local exchange and exchange access service that significantly exceeded the cost of providing service, and rates paid by those customers would implicitly subsidize service provided by the same carrier to others. By adoption of the 1996 Act, Congress has provided for the development of competition in all telephone markets. … [which] means that today's pillars of implicit subsidies—high access charges, high prices for business services, and the averaging of rates over broad geographic areas—will be under attack.[10]

Competition has grown rapidly in markets served by ILECs since 1996, making the implicit subsidies for universal service tenuous and, ultimately, unsustainable. For example, rate averaging and higher rates to business customers establish price umbrellas under which competitors not subject to carrier of last resort obligations can target the business customers

[10] *USF First Report & Order* at 8784, ¶ 17.

paying inflated prices. Consequently, when regulators force ILECs to overcharge some customers to subsidize affordable service for others, they encourage customers to terminate ILEC services, even though the pricing is economically inefficient. In addition, technological change is affecting universal service support by altering the way supported services are delivered and, potentially, the costs of providing service in high-cost areas. It is time that these anomalies are rectified.[11]

In the *Ninth Universal Service Order*, the Commission was faced with the decision whether to examine eligibility for universal service funds at the state level, or at a more discrete level. It refused to employ a methodology that would distribute universal service support on a wire center basis because to do so would

> ignore the state's authority and ability to ensure reasonable comparability of rates within its border. Stated another way, the federal mechanism would shift funds from low-cost wire centers (and customers) in other states to fund high-cost wire centers in the state at issue, and would do so without giving the state the opportunity to support its high-cost wire centers with funds from its low-cost wire centers.[12]

Thus, the Commission's decision to employ a state-wide allocation mechanism was entirely premised on the assumption that a state could satisfy its obligations within its own borders. However, the decision was not based on whether a wire center allocation methodology as a factual matter was necessary to promote "sufficiency." In fact, the Commission has not yet

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[11] The due process of clause of the Constitution requires that the regulator maintain its consistent compensation mechanism without leaving the carrier without a workable opportunity to recover its costs. *Duquesne Light Co. v. Barasch*, 488 U.S. 299, 315 (1989)("[A] State's decision to arbitrarily switch back and forth between methodologies in a way which required investors to bear the risk of bad investments at some times while denying them the benefit of good investments at others would raise serious constitutional questions.").. The only other method to rectify the unsustainable cross subsidy problem would be to all local rates in high cost rates to rise to recover their relevant costs. However, Section 254's "reasonable comparability" mandate directly opposes such a result.

[12] *USF Ninth Report & Order* at 20460, ¶ 49.

analyzed whether statewide or study-area wide averaging produces implicit subsidies. And it has certainly not engaged in an examination of whether states have achieved this mandate.

For years, industry members have known that price-cap carrier high-cost areas do not enjoy sufficient support from the USF to enable those carriers to provide service at comparable rates in an area that would otherwise be uneconomic to serve. In particular, study-area averaging for most larger carriers involves pooling together low and high-cost areas in order to achieve rates that produce reasonable results for the study area as a whole.

However, the Act's requirement that support must be "explicit" certainly indicates that Congress intended that implicit subsidies, particularly those that are inconsistent with competition, must be eliminated. It is therefore obvious that a nationwide or state-wide systems of implicit subsidies should be eliminated under the Act. Even the Commission realized this when it indicated states should solve the high cost areas within their own states for nonrural areas.[13] At a minimum, and in light of the existence of competition in cities and towns across the country, the Commission must divide targeted support areas in discrete enough sizes so that it can correctly identify and group exchanges that exhibit similar types of cost characteristics. A state-wide or study-area-wide methodology does not therefore begin to address the "explicit" requirement in the statute.[14]

The root cause of the current system's inadequacy is not difficult to identify. Indeed, the Joint Board itself accurately identified the problem in its Recommended Decision:

> …the current high-cost universal service mechanisms are dated and need to be modernized in several ways. New entrants often

[13] *Id.* at 20457-58, ¶¶ 45-46.

[14] Although it is true that the Commission is not required to implement a statute all at once, see *Qwest I*, 258 F.3d at 1205, after 9 years in place, it is time to move forward.

> compete only in the densely populated areas that have relatively low costs. This makes it much more difficult for incumbent LECs to charge the same rates in both their low-cost, densely populated areas and their higher cost remote areas. None of the existing support mechanisms adequately recognizes this phenomenon, which generally occurs on a smaller scale than the typical telephone exchange.[15]

Simply stated, the existing high-cost mechanism does not adequately reflect the realities of today's competitive telecommunications market.

Today's market is dominated by intermodal competition where competitors have the freedom to pick and choose where they will serve, often opting to serve profitable areas while ignoring other higher-cost regions. Yet, as correctly described in the reference above, the current mechanism perpetuates monopoly-era assumptions regarding cross-subsidization, and propagates the myth that companies can rely on revenues earned in low-cost areas to offset costs incurred in high-cost areas. As the Commission considers the numerous plans and proposals put forth to reform USF it is absolutely crucial that it balance two needs: the need to control the growth of the fund, and the need to reform the fund in such a way that all high-cost areas receive adequate support in the face of increasing competition.[16]

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[15] *Comprehensive USF Reform Recommended Decision* at ¶ 22.

[16] It is precisely this very balance that the Tenth Circuit agreed was permitted. *Qwest I*, 258 F.3d at 1199.

III. EMBARQ'S BROADBAND AND CARRIER-OF-LAST-RESORT SUPPORT (BCS) SOLUTION

The Commission currently has a unique opportunity to address the gaping hole in section 254's implementation that is represented by the failure to adequately fund high cost areas in price cap study areas. Embarq submits that the BCS Solution not only addresses this defect, but can be effectuated promptly, with the same level of USF contributions as today, and utilizing tools that have already been developed. Although this plan admittedly does not address every problem that exists with universal service today, it represents a significant step in the right direction and would be far better than no steps at all while complete reform is debated. As such, the BCS Solution has significant advantages for consumers and can work effectively with the other proposals that have been made to date.

For example, in AT&T's recent comments filed in this docket the company's proposal for transitioning universal support from voice to broadband is only one part of a large, complex, and ambitious plan that also incorporates access reform, deregulation, and differing levels of state involvement.[17] Embarq submits that the Commission must accurately identify high-cost areas at a granular level and distribute adequate support to those places before it can consider a broader proposal such as AT&T's. Furthermore, this increased granularity would also position the Commission to better address intercarrier compensation reform and deregulation, by ensuring that all areas with a legitimate need for support are addressed and the continued viability of rural networks is no longer threatened.

[17] AT&T proposes a Broadband Incentive Plan as only the first part of its proposal. AT&T Comments at 4.

A. Areas Served by Price Cap Carriers Would All Be Consolidated Under the New BCS Mechanism

Embarq enthusiastically supports the Joint Board's recent Recommended Decision in which it acknowledged of the need to adequately support carriers that serve as providers-of-last-resort ("POLRs") or carriers-of-last- resort ("COLRs"). While it is understandable that regulators would have a keen interest in promoting the deployment of broadband services and mobility services, it is important to note three facts regarding COLR support: First, COLR obligations are *ongoing* obligations and therefore require *ongoing* support to ensure the continued provision of service in high-cost areas. Second, it is only through ILECs fulfilling their COLR obligations that broadband services and mobility services are (or can be made) available in high-cost, rural areas. The best way to promote broadband deployment in extreme rural areas is to adequately support the only underlying network that is ubiquitous in those areas, the COLR network. And third, each year ILECs spend billions of dollars on new capital in uneconomic areas in fulfillment of their COLR obligations.[18] In fact, it is not an overstatement that the only reason "universal" service is truly universal today is because of COLR obligations. Accordingly, a mechanism that acknowledges and emphasizes the COLR function is not only justified but crucial to the continued provision of telecommunications services in all regions of the Nation.

However, the Joint Board's Recommended Decision makes certain distinctions and draws certain conclusions regarding COLR support that must be addressed. First, the Recommended Decision advocates maintaining the status quo for existing *rural* support

[18] Indeed for 2007 approximately 43% of Embarq's capital budget—several hundreds of millions of dollars—was spent on COLR-related builds, much in otherwise-uneconomic areas to serve.

mechanisms, but "…believes that further analysis of *non-rural* funds is required."[19] Embarq submits that the record in this proceeding is replete with evidence that the inadequacies of the current system are not limited to non-rural carriers.[20] The two above-mentioned failures of the current support system—ignoring the competitive realities of the marketplace, and failing to align support with costs as closely as possible—are not limited to the non-rural mechanism. The use of study-area average costs (per the rural mechanism) or statewide-averages of study-area average costs (per the non-rural mechanism) *both* perpetuate the false assumption that revenues earned in low-cost areas can offset costs incurred in higher-cost areas. In fact, in the case of a state that contains a single non-rural study area (such as Mississippi or Colorado) the two approaches address the exact same geographic area.

This is not to suggest that Embarq supports the all-out elimination of a rural/non-rural distinction; Embarq does *not* support eliminating this distinction. But if there is a reasonable distinction to be made regarding universal service it is a "price cap v. non-price cap" distinction. The fundamental difference in business models between price cap and non-price cap carriers indicates that need for explicit support differs as well, as should the mechanism designed to provide such support.[21] COLRs that operate under rate-of-return regulation have rates set by regulators on a cost-plus basis. This leads to the well-established economic fact of creating a strong (some might argue overly-strong) incentive for investment, since the rates set by regulators include a specified return on that investment. Alternately, price cap providers charge rates that are separated from costs and investment. Because the incentives are different between

[19] Recommended Decision ¶ 39 and ¶ 40, emphasis supplied.

[20] *See, e.g.*, Reply Comments of Embarq in WC Docket No. 05-337 CC Docket No. 96-45 filed July 2, 2007.

[21] *See, e.g.*, comments of AT&T, Inc. in WC Docket No. 05-337, CC Docket No. 96-45 filed May 31, 2007.

these two groups, as are the opportunities for cost-recovery, it is reasonable that support mechanisms should be different as well.

Under the BCS Solution, high cost loop support would be distributed on the basis of two separate categories: price cap and rate-of-return carriers. This distinction would replace the current bifurcation between rural and non-rural companies for USF purposes (and only for USF purposes). Given the unique issues facing price cap carriers as outlined above, the re-categorization of support would better target support in accordance with the actual needs of the companies and make implicit subsidies explicit for price cap carrier high-cost and rural properties.

Most non-rural carriers and some rural carriers are regulated pursuant to price caps at the federal level (and often also at the state level). AT&T, Verizon, Qwest, Iowa Telecom, and some Century, Embarq, and Windstream properties are price-cap carriers designated as non-rural. Most Embarq, Frontier, Windstream and Consolidated properties are also price-cap carriers, but they are designated as rural under the Act. Conversely, some non-rural carriers continue to operate under a rate-of-return methodology.[22] In establishing the rural versus non-rural distinction in the high cost program, the Commission did not address the potential impact on the need for support that type of regulation for interstate rates would produce. In fact, the Commission deferred imposition of the HCPM to rural carriers, thus leaving non-rural carriers as the intended target of such reforms, but did nothing to justify making a distinction based on such differences.[23] In addition, the original USF decision did not even intend to create a permanent

[22] For example, SureWest and ACS.

[23] *USF First Report & Order*, 12 FCC Rcd at ¶ 252.

distinction among types of carriers.[24] Price cap carriers, however, face common challenges that should be accommodated in the same way by the universal service system.

Price cap regulation was adopted at the federal level in the early 1990s in order to provide a more efficient method of setting prices that more closely resembled the operation of competitive markets. Rather than allowing carriers to recover their costs on a cost-plus basis, the price cap methodology capped rates and only allowed adjustments for inflation, a productivity factor, and certain externally imposed costs. The price cap basket and bands approach entitled carriers to a certain amount of pricing flexibility irrespective of costs, but the productivity factor relentlessly decreased permissible revenues, forcing a price cap carrier to continually search for efficiencies in order to earn a reasonable rate of return.[25] Price cap regulation effectively divorces rates from costs.

Because of the need to improve efficiencies, maintenance and expansion of rural networks requires a carrier to make a careful economic analysis of the potential revenues that can be achieved from customers in particular territories. If customers cannot produce sustainable revenues, there is a disincentive to upgrade a network to accommodate advanced communications or to modernize facilities. This disincentive has been manifested to date in the interest of many price cap carriers to sell existing exchanges to smaller carriers with different economic profiles.[26] Given that the Commission has established the "parent trap" rule, however,

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[24] *Id*. at ¶ 291.

[25] *Price Cap Performance Review for Local Exchange Carriers*, Fourth Report & Order in CC Docket No. 94-1 and Second Report & Order in CC Docket No. 96-262, 12 FCC Rcd 858 (1995).

[26] *See, e.g., Petition for Forbearance of Iowa Telecommunications Service, Inc. d/b/a/ Iowa Telecom Pursuant to 47 U.S.C. 160(c) from the Deadline for Price Cap Carriers to Elect Interstate Access Rates Based on the CALLS Order or a Forward Looking Cost Study*, Order, 17 FCC Rcd 24319 (2002).

there is a limit on the ability to sell high cost exchanges as a way to ensure that customers enjoy the benefits of added investment in their exchanges.[27] Such a result is antithetical, however, to ensuring that rural subscribers have access to modern and advanced services, something which Section 254 was intended to guarantee. This disincentive to investment in rural America by price cap companies must be addressed by the Commission to fulfill its universal service mandate.

B. The BCS Would Initially Be Funded to Distribute Approximately $1 Billion.

BCS would initially be funded at the level of approximately $1 billion per year. This amount would be available both to incumbent providers and CETCs, in order to preserve competitive neutrality. The BCS fund would not entail a higher contribution percentage, but rather would come from current USF commitments in specific programs. Thus, the Commission could continue to protect the integrity of the fund by avoiding an unsustainable size of the overall USF. If additional study areas are converted to price cap regulation, they would receive high cost loop support, if at all, from the BCS mechanism. The amount of money that the converted study area received prior to conversion would be transferred to the BCS fund, and distributed in accordance with the BCS mechanism, keeping the overall fund size in check.[28]

[27] 47 C.F.R. § 54.305.

[28] Since the amount of money available to remaining rate-of-return areas would continue as before, rate-of-return recipients of high cost loop support would be in no different position than they were in prior to the price cap conversion.

The approximately $1 billion BCS fund is easily derived from existing USF funding. Embarq submits the following estimates of the amount of support available from various existing high-cost support mechanisms.[29]

Source	Current Amount (approx)
High-Cost Model (Non-Rural) (incl. CETCs)	$346,000,000
High-Cost Loop (Rural) (incl. CETCs)	$101,000,000
Interstate Common Line Support to Wireless	$406,000,000
Interstate Access Support to Wireless	$141,000,000
Total	$994,000,000

In addition to the elimination of identical support, the Commission has tentatively concluded that wireless ETCs should no longer receive access replacement support in the form of Interstate Access Support (IAS) or Interstate Common Line Support (ICLS).[30] The rationale behind this conclusion is clear and sound: Wireless CETCs have never relied on access charges to cover their costs; therefore they have never demonstrated a legitimate need for the revenues produced by access charges or a legitimate need for the USF dollars that replaced these access charges as a result of the Commission's CALLS and MAG Orders.[31] Also, because the IAS fund is targeted at approximately $650M annually, payments from the IAS fund represent a zero-sum game across all IAS recipients: the IAS dollars that have been received by CETCs have come *at the expense* of incumbent ETCs' IAS dollars. It is problematic in and of itself to provide access replacement to a CETC that never had access revenues to replace (a phenomenon that describes both IAS and ICLS receipts for CETCs); but to do so at the expense of adequately compensating

[29] *See* Universal Service Administrative Co**.,** Federal Universal Service Support Mechanisms Fund Size Projections for the Second Quarter 2008, at 9 (Feb. 1, 2008).

[30] Identical Support NPRM ¶ 23.

[31] *See* CALLS Order, 15 FCC Rcd at 12962 (FCC 00-193) and MAG Order, 16 FCC Rcd at 19613 (FCC 01-304).

incumbent ETCs for real access revenues that were explicitly reduced by the Commission (the IAS situation) is a gross distortion of the intent behind the federal USF mechanism. The Commission tentatively concludes that permitting CETCs to receive access replacement dollars is inconsistent with how competitive ETCs recover their costs or set rates. Embarq agrees, and would add that allowing CETCs to receive access *replacement* dollars—when no revenue stream was ever lost to be *replaced* by these funds—fails the fundamental test of competitive neutrality as well. The BCS achieves competitive neutrality by actually converting these access replacement dollars to dollars that are available to CETCs if the CETC actually incurs the cost of building network and providing service in the highest-cost areas.

Establishing the BCS initially at approximately $1 billion is clearly justified and is by no means excessive. Embarq notes that Qwest recently submitted its own cost estimate of paying high cost loop support based on a wire center methodology similar to the BCS Solution. Based on use of an affordability benchmark of 125% and a wire-center-based distribution scheme, Qwest's plan would estimate costs of $ 1.9 billion.[32] As stated previously, NECA has estimated that some $11.9 billion in up-front investment and an annual revenue requirement of some $3 billion would be necessary to ubiquitously fund broadband. Thus, a minimum of approximately $1 billion is clearly called for through various analytic devices.

While approximately $1 billion is not insufficient, it would clearly not fund all network requirements in the first year. Such a conclusion, however, does not also lead to the conclusion that the plan would violate the "sufficiency" requirement of Section 254. As the Tenth Circuit acknowledged, the Commission is entitled to balance the goals of predictability and sufficiency

[32] Comments of Qwest Communications International, Inc., WC Docket 05-337, at 30-32 (Mar. 27, 2006).

in its analysis.[33] Thus, ensuring that ratepayers do not pay excessive amounts for universal service is clearly a permissible goal of the Act. The Commission cannot predict the precise amount of money beforehand given the dynamics of the market, changing technologies and cost structures, and different consumer needs. Notwithstanding, the approximately $1 billion initial fund can be easily justified as a balanced approach to meeting the Act's multiple goals.[34] In order to be sure that the Commission is fulfilling its statutory mandate, however, the amount allocated to the BCS could be reevaluated after a reasonable period of time, such as five years, to determine whether it is producing the desired impact.

With price cap conversions, any additional funding would be transferred based on the amount of high cost loop funding the converted study area received before the conversion. This provides the assurance that such funding amount meets the "sufficiency" requirement of the rate-of-return high cost loop fund prior to the transfer. Thus, the overall BCS fund size would continue to meet the "sufficiency" test. There is also no reason to impose the "parent trap" rule on any purchase of a rate-of-return property by a price cap carrier since the price cap carrier would only enjoy the BCS as dictated by the plan and could not game the system by splitting up study areas in order to maximize universal service payments.[35]

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[33] *Qwest I*, 258 F.3d at 1199.

[34] From existing estimates, the Commission can rationally predict the necessity of a fund of the size of $1 billion. In doing so, it would be entitled to deference by the courts. *Texas Office of Pub. Util. Counsel v. FCC*, 265 F.3d 313, 328 (5th Cir. 2001), on remand, *Access Charge Reform*, 18 FCC Rcd 14976, 14983, ¶ 13, *et seq*. (2003) ($650 million IAS fund justified based on statistical showings in the record and balancing competing interests).

[35] The "parent trap" rule limits the acquiring carrier to the same high cost support that was received per line by the seller. 47 U.S.C. § 54.305. The Commission has already concluded that it need not employ a "parent trap" rule when a USF recipient employs a forward-looking cost methodology. *First USF Report & Order* at ¶ 308.

Given the way the mechanism would work, BCS support would be effectively capped since amounts are distributed based on the relative amount of forward-looking loop costs identified by the HCPM at the time the BCS is instituted. The BCS support in a wire center would only be revisited after five years. Since this figure does not vary over the interim, the overall size of the fund will not vary.

C. Support Would Be Calculated on a Wire-Center Basis

BCS support would be directed at wire centers, which are a granular unit of analysis that removes most of the problems in providing sufficient support that are caused by study-area averaging. In practice, wire centers would be a competitively neutral distribution method in low-density areas as all networks are built out around the few towns and use the same backbone network to connect to the rest of the country. Although a wire center approach does not reach the level of granularity that would precisely identify the truly high-cost parts of rural areas, as opposed to service to towns and cities, the approach would go a long way to rationally identifying high-cost areas. After implementation of the wire-center methodology, the Commission could investigate the possibility of calculating support on an even more granular basis to achieve greater precision.

D. Household Density Is an Appropriate Allocation Methodology

Carriers serving high-cost areas will play a key role in providing the advanced communications of the 21^{st} century, but they cannot do so at reasonably comparable rates unless they receive funding that is truly sufficient. Universal service is intended to explicitly subsidize rural and high cost areas so that carriers will be motivated to serve uneconomic areas of the country. Although the protected monopoly was eliminated by the 1996 telecommunications reform, carrier-of-last-resort has not changed at all. Several important factors work in concert to increase significantly the costs of infrastructure deployment in high-cost areas. Universal service is the only mechanism available to permit carriers to recover these extraordinary costs.

The cost of providing telecommunications service varies significantly depending on population density, the distance over which infrastructure must be deployed, topography, and socioeconomic conditions.[36] First, a large part of the cost of a telecommunications network is shared and subject to significant economies of density and/or scale. As the Commission has noted repeatedly, "a lower population density generally indicates a higher cost area."[37] These distinctions result in significant variation in the cost of deploying facilities in rural and other high-cost areas, on the one hand, and most cities and suburban areas, on the other.

As in other networked industries, the fixed costs associated with the provision of telecommunications are generally high in comparison to the incremental (marginal) costs. This means that in areas where there are fewer consumers, each customer must bear a higher portion of the network's fixed cost. Thus, it is not surprising that in a recent report, the Government Accountability Office ("GAO") found that "[t]he most frequently cited cost factor affecting broadband deployment was the population density of a market," and that "the cost of building a broadband infrastructure in areas where people live farther apart is much higher than building infrastructure to serve the same number of people in a more urban setting."[38]

[36] This is true for all technologies, although the actual investments needed and the relative efficiencies of different technologies may differ from place to place.

[37] *Federal-State Joint Board on Universal Service; North Carolina RSA 3 Cellular Telephone Company; Petition for Designation as an Eligible Telecommunications Carrier in the State of North Carolina*, CC Docket No. 96-45, Order, 21 FCC Rcd 9151 ¶ 23 (rel. Aug. 14, 2006).

[38] GAO, *Broadband Deployment Is Extensive throughout the United States, but It Is Difficult to Assess the Extent of Deployment Gaps in Rural Areas* at 19 (May 2006) ("*GAO Report*").

Second, sparsely settled areas will also entail higher costs to serve because facilities will need to be constructed over far longer distances to reach end users. The distance between end users and the need to aggregate a critical mass of traffic in a switch together often necessitate the use of particularly long loops, increasing costs dramatically. Accordingly, the Commission has stated that "for universal service purposes … cost differences caused by differing loop lengths are the most significant cost factor."[39]

Accordingly, Embarq proposes that the Commission would use household density as the metric for allocating high-cost support. This would be a competitively neutral and stable methodology that would reasonably accurately identify those areas where support is truly needed. To facilitate implementation and minimize legal concerns that would accompany using a new and un-reviewed density allocation metric, the Commission should initially use a proxy for a density allocator. The Commission currently has one in the form of the loop cost output in the current iteration of the Hybrid Cost Proxy Model currently used by the Commission. The primary factor for relative loop costs in the model is line density, which is a reasonable estimate of household density. Instead of estimating total cost of local service, the HCPM would be used one last time for the sole purpose to identify estimated loop costs. Future assessments could be done (for example, every five years) using a superior model or some other mechanism.

Embarq understands that there has been substantial controversy about the use of the HCPM. In fact, the Commission refused to expand its use after it was initially established.

[39] *Federal-State Joint Board on Universal Service (Forward-Looking Mechanism for High Cost Support for Non-Rural LECs)*, CC Docket No. 96-45, Fifth Report & Order, 13 FCC Rcd 21,323, 21,355 ¶ 75 (1998).

However, the Commission has allowed it to be used to compute estimated loop costs,[40] which may be the most stable portion of the HCPM and the one which entails the least controversy. As indicated before, the costs of the loop do not vary materially over time as do the costs of other network elements.[41] Therefore, existing loop cost estimates for each wire center can be fairly relied on even without any change to the HCPM. In addition, the BCS Solution would not use the actual costs the HCPM generates to distribute support. Rather, the BCS Solution only uses the *relative* level of costs to distribute support among price cap wire centers using the $1 billion fund. Therefore, any concerns that the Commission may have on the accuracy of the model are substantially ameliorated. In addition, Embarq proposes that price-cap wire centers Alaska and Puerto Rico continue to receive the same Non-Rural High-Cost support and Rural Loop support as they do today instead of being allocated different amounts based on the HCPM loop cost output. This is in recognition of the fact that the HCPM loop cost output is known to be flawed for those areas.

BCS Support would be distributed on a wire-center basis, targeting the highest cost wire centers in the country. All price-cap carriers would be required to provide current loop counts by wire center, which would be used as inputs in the calculation. First, the cost per loop would be calculated for each wire center. Second, the amount of support would be multiplied by the number of lines of the ILEC at some specified time prior to implementation, such as the last available quarterly loop count provided to NECA. Third, 75 percent of the costs in excess the

[40] *Cost Review Proceeding for Residential and Single-Line Business Subscriber Line Charge (SLC) Caps*, CC Docket No. 96-262, 17 FCC Rcd 10868, 10878, ¶ 23 (2002).

[41] *See* Section IV.A, *supra*.

Cost Benchmark would be distributed to each wire center.[42] The Cost Benchmark would be established at a level that would precisely distribute the approximately $1 billion fund. As indicated previously, the ongoing amount of support would not increase or decrease with changes in the number of lines. This fact reflects that the costs of providing the loop and the network are basically fixed and do not change as lines are lost or gained. In addition, this mechanism would provide a necessary level of stability that would promote investment in rural areas, a stability that has been sorely lacking under existing mechanisms. The amount of support should be evaluated after a set period of time, such as five years, to ensure that the fund is fulfilling its intended purpose.

When a new price cap carrier is added to the BCS, the same amount of support that it was receiving immediately before the conversion would be transferred to the BCS. This same amount of support would be distributed to the new price cap carrier using the same methodology that was used to establish other price cap carrier BCS amounts initially. However, the new distribution would only be based on the price cap converter's new wire centers. Thus the benchmark would be adjusted to produce a distribution of the transferred support to the price cap converter's highest cost wire centers.

E. Competitive ETCs May Receive Support if They Meet The Same Competitively Neutral Criteria that Apply to Incumbent ETCs.

Competitive eligible telecommunications carriers ("CETCs") would be eligible to compete to receive BCS on a competitively neutral basis with the ILECs. As such, Embarq's

[42] Seventy-five percent represents the estimated amount of loop costs that is allocated to the intrastate jurisdiction in the current nonrural mechanism. *USF Ninth Report & Order* at 10647 ¶ 63. Whereas the current Non-Rural Mechanism supports seventy-six percent, this is because it provides support to the total cost of serving the wire center, including switching and transport. The BCS Density Allocator would be based solely on the loop costs, however, so support should be calculated at seventy-five percent.

plan is similar to that which is described in the Joint Board's November 2007 Recommended Decision.[43] All CETCs will have the opportunity to receive BCS, provided they fulfill the conditions established.

In addition to the ILEC in the wire center, there will never be more than one additional BCS recipient in that wire center. Thus, the USF will no longer fund competition, but rather will focus on support provided to providers of last resort, including any mobility function that one of the eligible providers would offer. Where there are more than two CETCs who wish to be eligible for BCS support, they could compete for the right to receive BCS in accordance with Commission-established procedures. If there is a single CETC, however, it would receive the same support in the wire center as the ILEC.[44]

This approach would ensure that universal service support is competitively neutral since all providers would have an equal opportunity to obtain funding under the proposal. The existing ILEC, as the long-time carrier-of-last-resort, of course would continue to be funded by the BCS mechanism because it has already demonstrated that it has spent an enormous sum in building and maintaining a ubiquitous network that brings communications to all, which the universal service policy seeks to promote. The fact that the ILEC would share BCS with the CETC on a fifty-fifty basis would ensure that the size of the fund would not grow, consistent with the intent of CETC Cap, which may or may not remain in effect.[45]

[43] *Comprehensive USF Recommended Decision* at 20490-93 ¶¶ 55-68.

[44] Embarq does not take a position with respect to the appropriate mechanism for the commission to use to select among competing CETCs. It could use auctions on an experimental basis for this selection, an RFP process, or some other selection criterion.

[45] *CETC Price Cap Freeze Order* at ¶ 1.

A BCS–eligible company (the ILEC and the CETC, if any) must serve the entire wire center using its own facilities (which may include those leased at market rates from other providers) within five years of a decision granting it eligibility. A CETC could use a mix of its own facilities and resale during the five-year build-out period. The CETC would have the same carrier-of-last-resort and broadband obligations that the ILEC must meet in this territory.

Although the Commission initially did not impose carrier-of-last-resort requirements on CETCs in 1997, history has shown that such policy is inconsistent with Section 254. Although Section 214(e) defines the methodology for becoming an ETC, nothing in that section or in Section 254 mandates how the Commission should decide to distribute support. Section 254 clearly provides the Commission with wide latitude to grant support based on meeting universal service obligations.[46] The fact that wireless CETCs had received a staggering and growing share of universal service support, without any obligation with teeth to build out to serve a rural territory, attests to the problems with the existing approach.[47] Imposing such a requirement will ensure that universal service money is actually resulting in network build out to serve rural Americans, the clear intent of Section 254. Therefore, the Commission should impose a carrier-of-last-resort requirement on all recipients of BCS..

All BCS recipients will be required to commit to provide broadband that covers 85 percent of the lines in each supported wire center using its own facilities within five years at a speed of 1.5 Mbps in one direction. The broadband commitment will ensure that USF is used to build a robust network that supports both modern voice and high capacity broadband services in

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[46] Indeed, the Commission exercised that authority when it placed significantly increased obligations on CETCs in *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, 20 FCC Rcd 6371 (2005)("*ETC Guidelines Order*").

[47] *CETC Freeze Order* at ¶¶ 6-7.

a reasonable time frame. With the broadband commitment, it is not necessary to include broadband services as a supported service at this time, which accomplishes the Commission's and Joint Board's objectives without foundering on difficult legal questions regarding the appropriate regulatory classification for broadband and the ability to support services that cannot be practicably deployed ubiquitously by supported carriers.

IV. THE BCS SOLUTION OFFERS MANY BENEFITS, AND IT IMPROVES OTHER PROPOSALS FOR BROADER REFORM.

Although the BCS Solution does not address every issue outstanding with respect to USF, it offers many advantages for consumers and it supports (and may be essential to) many of the other proposals made in the docket to date. It also makes substantial progress toward fulfilling the objectives announced last fall by both the Federal-State Joint Board on Universal Service in its Recommended Decision and the Commission in the Identical Support and Reverse Auction NPRMs.

A. The BCS Solution Facilitates Broadband Development in High-Cost Areas.

Providing support for the carrier-of-last-resort network, in addition to the broadband commitment, will promote broadband deployment to rural and high-cost areas of the country. In fact, with more rational, predictable, and sufficient support, price cap carriers and their competitors will be better able to deploy broadband just like most rate-of-return carriers have been able to accomplish. A commitment to provide broadband at speeds of 1.5 Mbps within five years produces a substantial improvement in the availability of broadband in rural and high-cost areas. As such, it takes a significant step in the direction that many policymakers have wanted to take to promote the availability of advanced services throughout the country.[48]

Much political attention has been paid to the issue of whether voice services are now a thing of the past and should continue to be supported. Many allege that "it is all about broadband."[49] Voice services continue to be the mainstay of our economy and provide a critical personal and business link among Americans and the rest of the world. The goal of promoting universal availability of voice services will continue to be critical into the future. Therefore, the frantic cries that "voice is dead" are at best overblown, and at worst unnecessarily manipulative. Although there is no doubt that broadband is the waver of the future, the Commission should look past this political rhetoric, and recognize that the universal service policy can promote both voice and broadband as currently formulated.

It is true that many Americans are migrating to data-based services, such as email and Internet.[50] These services increasingly require broadband functionality to perform quickly and as intended. Broadband is quickly losing its "luxury" moniker and becoming the way in which many Americans communicate, do business, and engage in commerce. One thing is certain,

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[48] The desire to promote the availability of broadband is nonpartisan. National Telecommunications & Information Administration, Networked Nation: Broadband in America at i (Jan. 2008), Statement of Chairman Kevin J. Martin, *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans*, WC Docket No. 07-38; Statement of Commissioner Michael J. Copps, *Comprehensive USF Reform NPRM*, at 51; Statement of John Dingell, Chairman, Committee on Energy and Commerce, The Future Of Universal Service: To Whom, By Whom, For What, And How Much (Jun. 24, 2008). As indicated previously, with the broadband commitment, it is unnecessary to include broadband as a supported service at this time. *See* Section III, *supra*.

[49] *See, e.g*., Comments of AT&T, WC Docket No. 05-337, at 3-4 (Apr. 17, 2008).

[50] Capital Hill Briefing of George Ford, Chief Economist, Phoenix Center for Advanced Legal & Economic Studies, *Developing a "National Broadband Strategy": Understanding the OECD Rankings and the Drivers of Broadband Adoption* (Jul. 28, 2008).

however, whether the services can be characterized as voice or data or a hybrid, *they all traverse the same network.* Thus, the reality is that USF support is all about supporting a ubiquitous multiuse network, not individual services.

It is important to note that there is currently no way to draw a clear distinction between using support dollars for broadband and using support dollars for the services listed in Section 54.101 of the Commission's rules.[51] Under the status quo, the support that ETCs receive can be used—and in many cases *has* been used, directly or indirectly—in the deployment of broadband if the upgraded facilities are used to provide supported telecommunications services.[52] The Joint Board explicitly noted how successful the current mechanism had shown to be for rate-of-return carriers in promoting broadband deployment, even if that was not the original intent.[53]

Given the facts above, a transition from supporting voice to supporting only broadband would, in reality, mean no more than changing from *allowing* USF dollars to be used for broadband to *requiring* that the dollars be used for broadband. And it is unclear whether such a transition would also entail a mandate to deploy broadband ubiquitously, as is the case with the current list of supported services. The price tag for a truly ubiquitous broadband network is very high and, therefore, may conflict with the Commission's stated goal of controlling the size of the fund.[54]

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[51] 47 C.F.R. § 54.101.

[52] In fact it is worth noting that, in terms of bandwidth, Section 54.101 makes explicit mention of a minimum bandwidth, but no mention of a maximum bandwidth.

[53] *Comprehensive USF Reform Recommended Decision* ¶ 39.

[54] For example, the National Exchange Carrier Association's often-referenced price tag of $11.9B to build broadband to 5.9M households carries with it, beyond the cost of initial capital, an annual "revenue requirement" estimated at $3B. (See www.neca.org)

In addition, current support dollars are, in many cases, still needed simply to maintain the existing, non-broadband network. The ubiquitous voice network is not static. Maintaining and expanding it is an ongoing obligation that entails ongoing costs that cannot be recovered specifically from end-users in high-cost areas if the rates remain "reasonably comparable."

The BCS, as proposed, offers the Commission a reasonable blueprint for a transition from supporting voice to supporting broadband. Such a transition requires that the Commission must first commit to accurately identifying, at a granular level, all high-cost areas. Network economics—wireline or wireless—dictate that an area that is high-cost for voice will also be high-cost for broadband.[55] At the same time, competitive marketplace realities dictate that implicit cross-subsidies that are unsustainable for voice are equally unsustainable for broadband. These two facts clearly indicate that any successful transition from supporting voice to supporting broadband will require the Commission to commit to providing support to many areas that currently receive no support, because their need for support has been masked by the use of averaging. This commitment will require a redistribution of funding dollars, and such a redistribution is appropriate, not only because areas will be supported that currently receive no support but because broadband is more expensive to deploy than the current list of supported services.

Once the Commission has committed to providing targeted and adequate support to all high cost areas—at a granular level—many of the problems of such a transition would be alleviated. The good news is that, assuming that the support dollars provided are adequate, targeted, and sufficient, the existing network—currently used to provide ubiquitous voice—is in

[55] *See, e.g.*, GAO, *Broadband Deployment Is Extensive throughout the United States, But it is Difficult to Assess the Extent of Deployment Gaps in Rural Areas*, (May 2006) ("GAO Report").

fact best suited to provide broadband to customers in all regions of the nation.[56] It is therefore ironic that CTIA, in its recently filed comments, complains that the current support mechanism is "designed to subsidize legacy wireline networks, while American consumers have moved on to mobility and broadband…"[57] In many parts of rural America that legacy network is the only reliable network available, and the only network that is enabling customers to "move on to" broadband.

B. The BCS Solution Provides for Explicit Support for High Cost Areas that is Not Being Provided Today and Stabilizes Those Receipts to Promote Investment in Rural Infrastructure.

As required by Section 254, the BCS Solution provides explicit USF to support high-cost and rural areas of price cap study areas, something which is not occurring today. The mechanism by definition does not impact high cost support provided to rate-of-return carriers. The BCS mechanism also stabilizes USF funding by freezing wire center support on a year-to-year basis, irrespective of changes in the number of lines in a property. The severe drop in access lines and universal service payments to many companies, coupled with the up-in-the-air nature of universal service policy, has been a serious hurdle to attracting capital to build out rural infrastructure.[58] Investors have turned decidedly negative about investments in companies that service rural America because of this uncertainty and declining revenue base. Such instability makes it more difficult and expensive for companies servicing rural territories to attract capital at reasonable rates, and it has the effect of encouraging companies to defer investment decisions

[56] Comments of Independent Telephone & Telecommunications Association, WC Docket No. 05-337 at 12 (Apr. 17, 2008)("ITTA Comments").

[57] CTIA Comments at 7.

[58] ITTA Comments at 5; Comments of CenturyTel, Inc., WC Docket No. 05-337, at 17 (Apr. 1, 2008).

until the uncertainty is lifted. The plan would resolve this uncertainty and bring stability that would improve the investment climate in rural America.

C. The BCS Solution Can Be Implemented Now And Deliver Substantial Benefits With Relatively Little Effort Or Cost.

There are no significant impediments to prompt implementation of the BCS Solution because it relies on existing procedures and methodologies. In addition, the plan is based on policies that have already been under development and simply need to be implemented. For instance, the Commission has already tentatively concluded that access replacement funds should not go to wireless carriers because they never had to rely on access charge revenue.[59] As another example, the current HCPM loop cost calculations would continue be used in order to make relative allocations among price cap high cost wire centers. This means that no changes to the model are either necessary or required, which would ease implementation. In addition, since the BCS Solution only uses the HCPM for loop cost modeling, a relatively stable and noncontroversial part of the HCPM, it avoids other more difficult issues that have been raised with respect to the model.

D. The BCS Solution Provides The Necessary Foundation For Future Reform.

The BCS Solution will institute a simple reform which will define relevant markets that require explicit support in order to maintain reasonably comparable prices. This definition, with its attendant support, will better define the type of costs and revenues that can be expected in these wire centers. As such, the BCS Solution would provide an important foundation for making further reforms not only to universal service, but also to intercarrier compensation.

[59] *Identical Support Rule NPRM* at ¶ 1.

For example, one of the salient problems with auction proposals in the record, is that they would actually perpetuate some of the current problems with USF, notably the failure to direct adequate, predictable, and sufficient support to many parts of the country. To be successful, an auction or other methodology for selecting between support recipients must first correctly identify the right areas to support and what baseline support level is acceptable. An auction proposal will fail ultimately if, like the ones in the record, it perpetuates the existing system of using study area averages and unsustainable implicit subsidies by limiting support to no more than existing levels. Existing support is insufficient in many areas, however, and correcting this problem should be a priority for both the Joint Board and the Commission as they proceed with fundamental USF reform. That is not to say, however, that overall high-cost support necessarily must increase because there are substantial savings to be had in other areas by correcting structural problems with the current USF.

In addition, the BCS Solution allows rate-of-return carriers to transition to price-cap regulation if they choose to with relatively little additional effort, and with predictable and definable effect on universal service receipts after the conversion. This stability will be of major benefit to those carriers making investment decisions in rural America, as well as to their equity and bond holders. The BCS Solution would thus also increase the opportunities for rate-of-return carriers to convert to price caps, a result which the Commission has stated it would like to achieve.[60]

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[60] *See, e.g., Windstream Petition for Conversion to Price Cap Regulation and for Limited Waiver Relief,* WC Docket No. 07-171, FCC 08-81, at ¶ 8 (rel. Mar. 18, 2008); *Policy and Rules Concerning Rates for Dominant Carriers*, CC Docket No. 87-313, Second Report and Order, 5 FCC Rcd 6786, 6789 ¶ 2 (1990).

E. The BCS Solution Promotes Competition by Reducing Reliance on Implicit Subsidies.

By targeting support based on wire center loop costs, USF is provided to rural and high-cost areas of the country that should receive explicit support rather than receiving implicit subsidies from the urban and suburban customers in the same study area. Granting universal service support for these rural price cap areas would allow carriers to adjust prices in urban areas to reflect the actual costs of providing service there. This will in turn allow more robust competition in those areas and improve customer prices. Congress has ruled that such a result should be the law of the land in enacting Section 254. And the Commission has frequently chronicled the need to achieve such an advantage in the marketplace.

Correctly defining price cap high cost wire centers will more correctly produce signals to the market in terms of what the costs and profitability of particular markets. This will better enable competitors to evaluate whether to serve those markets. In addition, the BCS Solution would improve competition in lower density markets by eliminating the implicit subsidies that ILEC rates contain in such areas. Such a result will significantly benefit consumers by making prices more competitive in urban areas. Competitors could also evaluate whether to serve particular wire centers based on the true economics of servicing a territory and the potential USF support, if any, they could be eligible to receive by agreeing to serve those wire centers. The BCS Solution thus prevents competitors from seeking universal service money for any other purpose than helping them enter particular markets, rather than to glean a windfall as is done under the current broken system.

F. The BCS Solution Is Competitively Neutral.

The BCS Solution not only maintains the competitive neutrality policy of the Commission, but actually correctly implements it. CETCs, including wireless carriers, would be eligible to receive BCS support on an equal basis with ILECs and would have to meet these same technology neutral conditions. CETCs would have the same build out, carrier-of-last-resort, and broadband commitment requirements as would ILECs. As such, the BCS Solution avoids the controversies associated with whether any support should be provided CETCs at all.[61]

More importantly, the Commission has already tentatively concluded that access replacement funding should not be provided to carriers that have never charged access charges.[62] The BCS, as proposed, takes the access replacement funding currently received by wireless carriers and makes it available to those same wireless carriers, but not as access replacement. Rather, it is available if the wireless carriers actually incur the costs for which support should be provided—the costs of building networks in high-cost areas that would, if left to market devices, go unserved.

Alltel, in its recently filed comments, argues that the proposal to remove access replacement support from wireless carriers would "… enshrine the outrageous notion that ILECs should be guaranteed significant advantages in the marketplace …."[63] Embarq respectfully submits that freedom to avoid building a network in uneconomic areas (enjoyed by wireless carriers but not by ILECs), the freedom to pick and choose which customers will be served and

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[61] As indicated previously, competitive neutrality does not require that all potential CETCs be funded by universal service. Rather, it is enough that there be an opportunity to participate through neutral and objective criteria.

[62] *Identical Support Rule NPRM* at ¶ 1.

[63] Comments of Alltel, Inc., WC Docket No. 05-337, at 39 (Apr. 17, 2008).

which will not (enjoyed by wireless carriers but not by ILECs), the freedom to price products in any fashion (enjoyed by wireless carriers but not by ILECs) are the true "significant advantages" in the marketplace. And until this competitive disparity is corrected, wireless cries over an absence of "competitive neutrality" must be taken with a very large grain of salt.

G. The BCS Solution Better Takes Into Account the Differing Investment Incentives of Price Cap and Rate-of-Return Carriers.

Price cap and rate-of-return regulation produce different impacts on investment incentives in high-cost areas. While rate-of-return carriers may recover increased investments in their rates, as well as receive universal funding based on their mostly rural study area characteristics, price cap carriers can only recover investments within its pricing flexibility bounds under the price cap formula. This narrow window of flexibility, particularly in light of growing competition, is insufficient to justify any serious new investment in rural areas, particularly when you consider the fact that price cap carriers often have large study areas that contain both urban and rural areas. In addition, price cap carriers tend to face more competition than rate-of-return carriers in their urban areas, and therefore have a limited ability to increase urban prices to recover rural investment. Therefore, the high cost loop support mechanisms would better meet statutory objectives in rural and high-cost areas once the program is bifurcated between price cap and rate-of-return carriers.

As the Commission has observed, there is nothing in the law that requires it to make a distinction between rural and non-rural carriers for universal service purposes.[64] And as has been amply pointed out, non-rural rate-of-return and rural price cap carriers often are not

[64] *Federal-State Joint Board on Universal Service*, Order, CC Docket No. 96-45, 19 FCC Rcd 11538, at ¶ 1 n.2 (2004); Tenth Report & Order, 14 FCC Rcd 10156 ¶ 458 (1999). Those distinctions, on the other hand, do make sense in terms of the relative rights granted under Section 251 interconnection or with respect to the grant of ETC status under Section 214(e).

adequately compensated under the current high cost loop mechanisms. Therefore, the BCS Solution would rectify the improper bifurcation in the existing program and better align high cost loop funding with the type of regulation applicable to the ILEC recipient.

H. The BCS Solution Resolves The Tenth Circuit Remand Of The Current Non-Rural Mechanism.

Embarq's new proposal would address the issues raised by the Tenth Circuit in its second remand of the non-rural mechanism. First, any carrier receiving support would be required to provide service in supported areas at rates that fall within a range of prices identified in a source such as the Commission's Reference Book of Rates. By tying explicit support with a specific range of rates—the same range of rates at which service is provided in urban areas—the requirement of reasonable comparability is robustly met.

One of the bedrock principles of USF reform is that "[t]here should be specific, predictable and sufficient Federal and State mechanisms to preserve and advance universal service."[65] Although the precise meaning of the word "sufficient" is somewhat elusive, at a base it generally means that the support should be enough to compensate carriers for the higher costs of serving rural and high cost exchanges. The Commission has in fact grappled with this issue on a number of occasions, but not yet successfully survived court challenge on this issue to date.

In the *USF Ninth Report & Order* the Commission concluded that it fulfilled the "sufficiency" requirement by establishing a mechanism in which non-rural carriers would receive support from the USF based on a forward-looking cost methodology, implemented through the HCPM, on a state-wide basis for all non-rural carrier wire centers in a state. The Commission concluded that this mechanism would produce support which would give states the

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[65] 47 U.S.C. § 254(b)(5).

ability to ensure that local rates were "reasonably comparable" with those found in urban areas. If a state's intrastate costs[66] exceeded nationwide average loop costs for non-rural carriers by more than 135 percent, then the state would be allocated high cost loop support targeted to higher cost wire centers.[67] States would be responsible for addressing any in high cost areas in a state that did not receive support because the state-wide averaging would generate no or inadequate support.[68]

The Tenth Circuit on appeal, however, found that the Commission had failed to define key terms in the Act.[69] Specifically, it found that the Commission failed to determine what the terms "sufficiency" and "reasonably comparable" meant in the statute. The Court also found that the Commission had improperly delegated to states the responsibility to address intrastate subsidy issues, since the Commission bore the statutory responsibility to ensure Section 254's mandate was fulfilled.[70] The Tenth Circuit thus reversed and remanded the case for further consideration.

On remand, the Commission modified its original mechanism. It defined "sufficiency" to mean "enough federal support to enable states to achieve reasonable comparability of rural and urban rates in high-cost areas serve by non-rural carriers."[71] It stated the belief that part of the

[66] The Commission determined that seventy-six percent of the HCPM service costs was attributable to the intrastate jurisdiction that were eligible for support under the universal service high cost loop mechanism. The remainder represented costs that were assigned to the federal jurisdiction and recovered through interstate charges. *USF Ninth Report & Order* at 20468 ¶ 63.

[67] *USF Ninth Report & Order* at 20463-64 ¶ 55. Non-rural carriers would directly receive support if the state cost per loop exceeded the benchmark.

[68] *USF Ninth Report & Order* at 20469 ¶ 66.

[69] *Qwest I*, 258 F.3d at 1201.

[70] *Id*. at 1203-04.

[71] *Qwest Remand Order* at 22562 ¶ 4.

"sufficiency" definition was to ensure that the fund was not larger than it needed to be to achieve the goals of the Act. The Commission modified its non-rural benchmark to provide support for costs which are two standard deviations above the national average cost per line for non-rural wire centers.[72] To induce states to achieve reasonably comparable rates, it adopted rate review and expanded certification processes to ensure that the states were fulfilling their part of the program.[73]

On further appeal, the Tenth Circuit again remanded the case because the Commission only defined the term "sufficiency" in terms of meeting one of the goals enumerated in Section 254.[74] The court also found that the Commission only evaluated the non-rural mechanism as to whether it ensured that "reasonably comparable" rates were "preserved", but failed to address the statutes' further goal that universal service be "advanced" though its mechanisms. Because of these unsupportable definitions and the failure to provide empirical support that its benchmarking methodology would promote the statute's goals, the court also invalidated the Commission's cost and rate benchmarks.[75]

Although the Commission has once again put out for comment the issues raised by the further remand, it has not yet resolved those issues.[76] And the Commission has taken further steps to address global reform of universal service, those reforms do not recommend a solution to

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[72] *Id*.

[73] *Id*.

[74] *Qwest II,* 398 F.3d at 1234. Specifically, the Commission only evaluated whether the non-rural mechanism met the criteria of Section 254(b)(3) and not any of the other criteria contained in subsection (b).

[75] *Id*. at 1236-37.

[76] *Federal-State Joint Board on Universal Service*, Notice of Proposed Rulemaking, WCB Docket No. 05-337, 20 FCC Rcd 19731 (2005)("*Qwest Remand NPRM*").

the problems of support for intrastate rates in the high cost and rural areas of price cap companies.[77]

The BCS Solution promotes the availability of quality services at just, reasonable and affordable rates because it allows for support in price cap high-cost areas where none is provided today.[78] Second, the BCS Solution advances the availability of advanced and information services because of the support it provides to telecommunications carrier networks and the broadband commitment required under the plan.[79] Third, access to telecommunications and information services is promoted in rural, insular and high cost areas at affordable and reasonably comparable rates because support in price cap areas is readjusted to more sufficient levels and support cannot be received by carriers if rates are not comparable.[80] Fourth, as demonstrated above, support is specific and predictable.[81] Fifth, the BCS Solution is competitively neutral because competing telecommunications providers may obtain BCS support

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[77] *See High-Cost Universal Service Support*, WC Docket No. 05-337, 22 FCC Rcd 20477, 20506 (Fed.-St. Jt. Bd. USF, 2007)("*Comprehensive USF Reform Recommended Decision*"). *See also High-Cost Universal Service Support; Federal-State Joint Board on Universal Service,* Notice of Proposed Rulemaking, WC Docket No. 05-337; CC Docket No. 96-45, 23 FCC Rcd 1531 (rel. Jan. 29, 2008 ("*Joint Board Comprehensive USF Recommended Decision NPRM*"); *High-Cost Universal Service Support; Federal-State Joint Board on Universal Service,* Notice of Proposed Rulemaking, WC Docket No. 05-337; CC Docket No. 96-45, 23 FCC Rcd 1467 (rel. Jan. 29, 2008)("*Identical Support Rule NPRM*"); *High-Cost Universal Service Support; Federal-State Joint Board on Universal Service*, Notice of Proposed Rulemaking, WC Docket No. 05-337; CC Docket No. 96-45, 23 FCC 1495 (rel. Jan. 29, 2008) ("*Reverse Auctions NPRM*")(collectively "*USF Notices*").

[78] 47 U.S.C. § 254(b)(1).

[79] 47 U.S.C. § 254(b)(2).

[80] 47 U.S.C. § 254(b)(3).

[81] 47 U.S.C. § 254(b)(5).

under the same conditions as can an ILEC.[82] Therefore, the BCS Solution would be an effective response to the Tenth Circuit remand.

V. CONCLUSION

In conclusion, Embarq submits that the Commission should adopt the BCS solution because it would stimulate substantial new broadband deployment; stabilize support for CoLR universal service; make substantial progress on the recommendations of the Joint Board and this Commission in the three NPRMs issued last fall; comply with the remand by the United States Court of Appeals for the 10th Circuit; create a more-stable foundation for further reform of USF; and do all of this without increasing overall USF support levels.

Respectfully submitted,

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September 18, 2008

[82] 47 U.S.C. § 254(b)(7). The other two USF goals outlined in Section 254(b) of the Act, equitable contribution mechanism and advances services to schools, libraries and rural health care providers, are covered under other USF rules not affected by this Plan and not implicated by the high cost program.